



Aviso

ECMWF data availability notification system

User workflows

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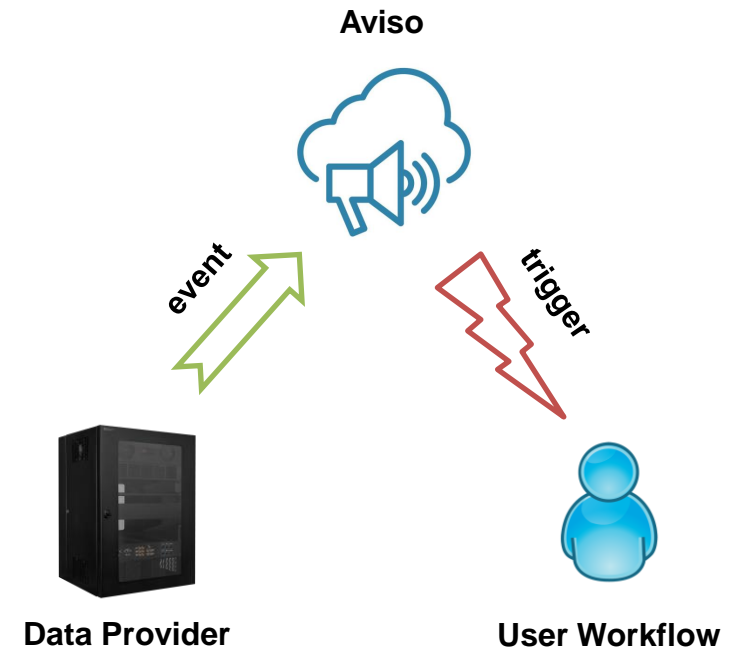
EWCloud Workshop 10-11-2021



Aviso – Aims

Aviso is a software developed at ECMWF with the aim of:

- Notifying for **ECMWF data availability**
- Meant for **automated systems**
- Support **When** <this> ... **Do** <that> ...

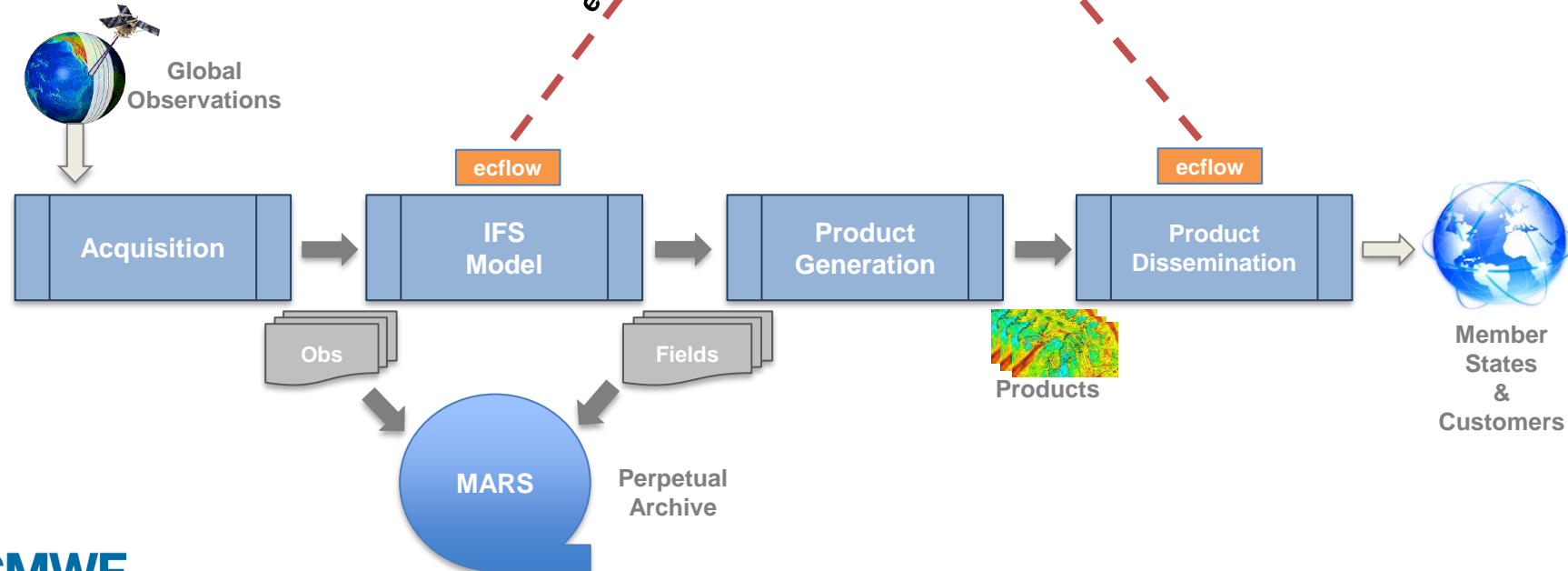


Aviso Events

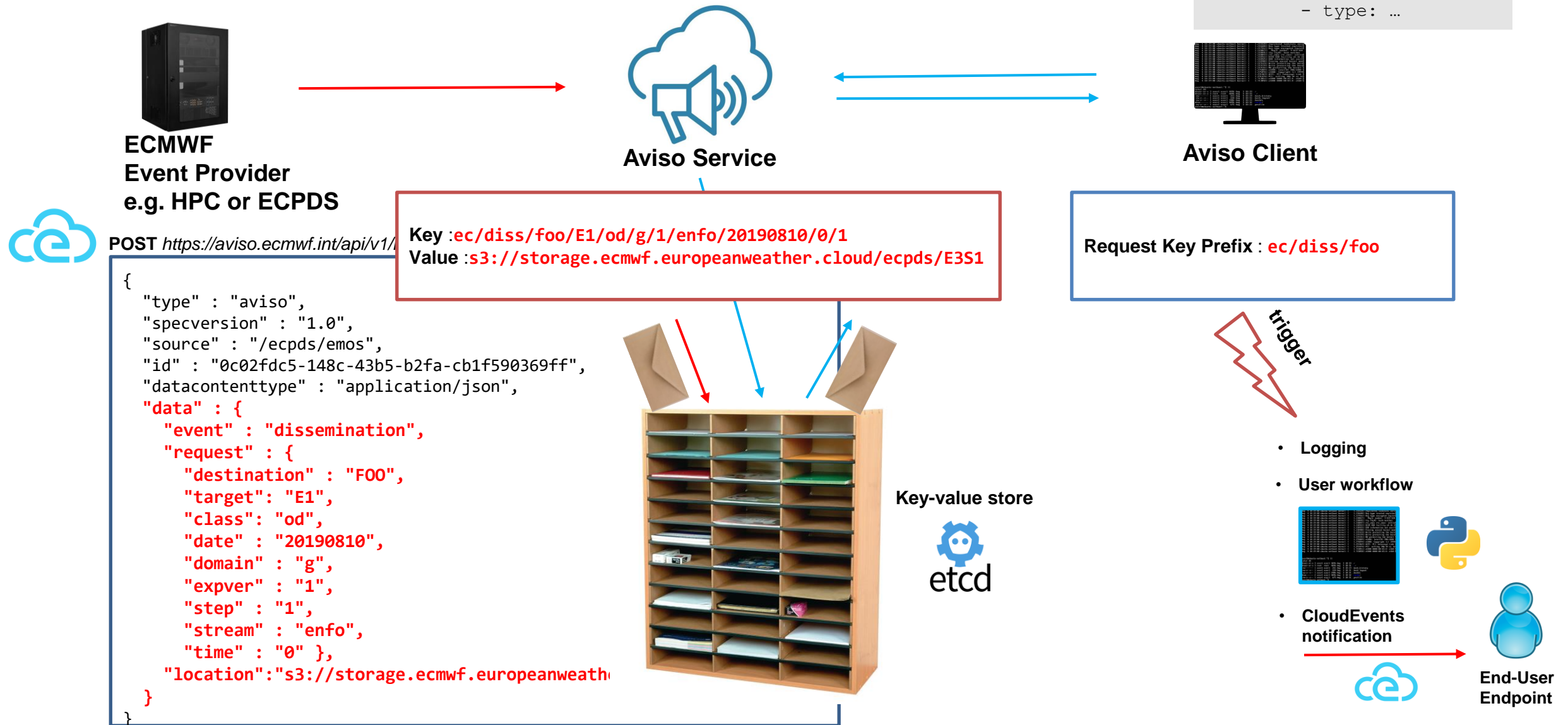
- Real-Time Model Output Data
- Product Dissemination

Events sent from workflow manager (ecFlow)

Event provider: ECMWF Dataflow

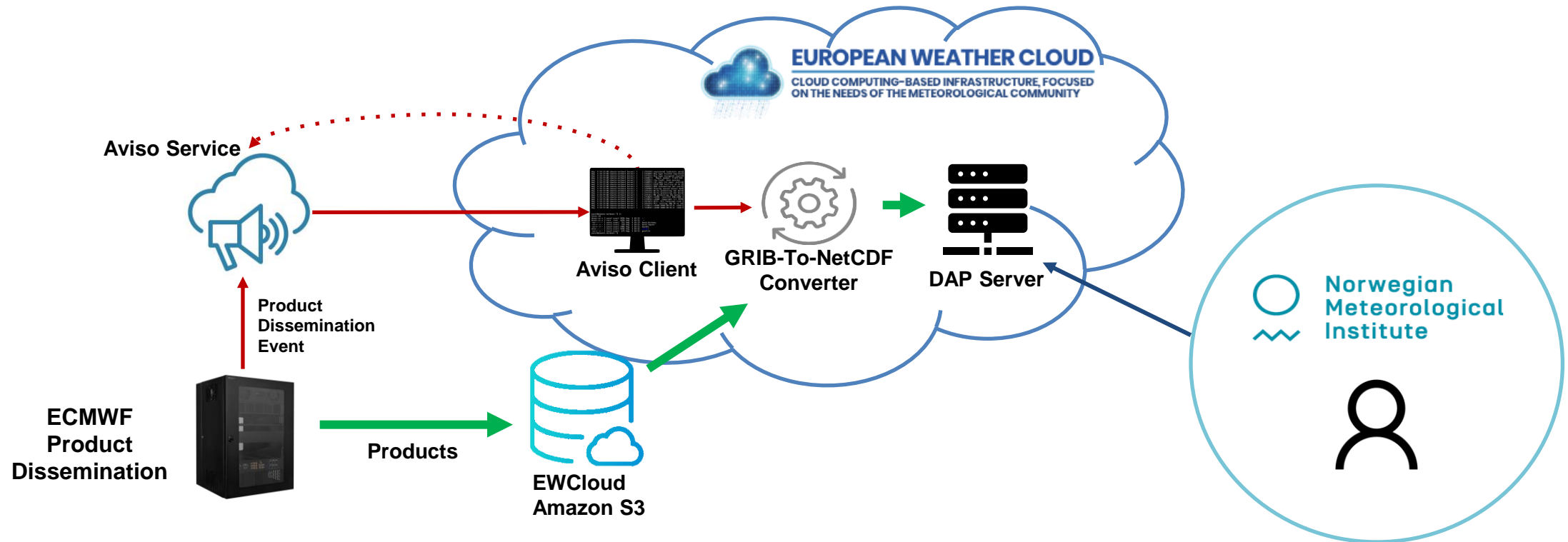


Notification workflow

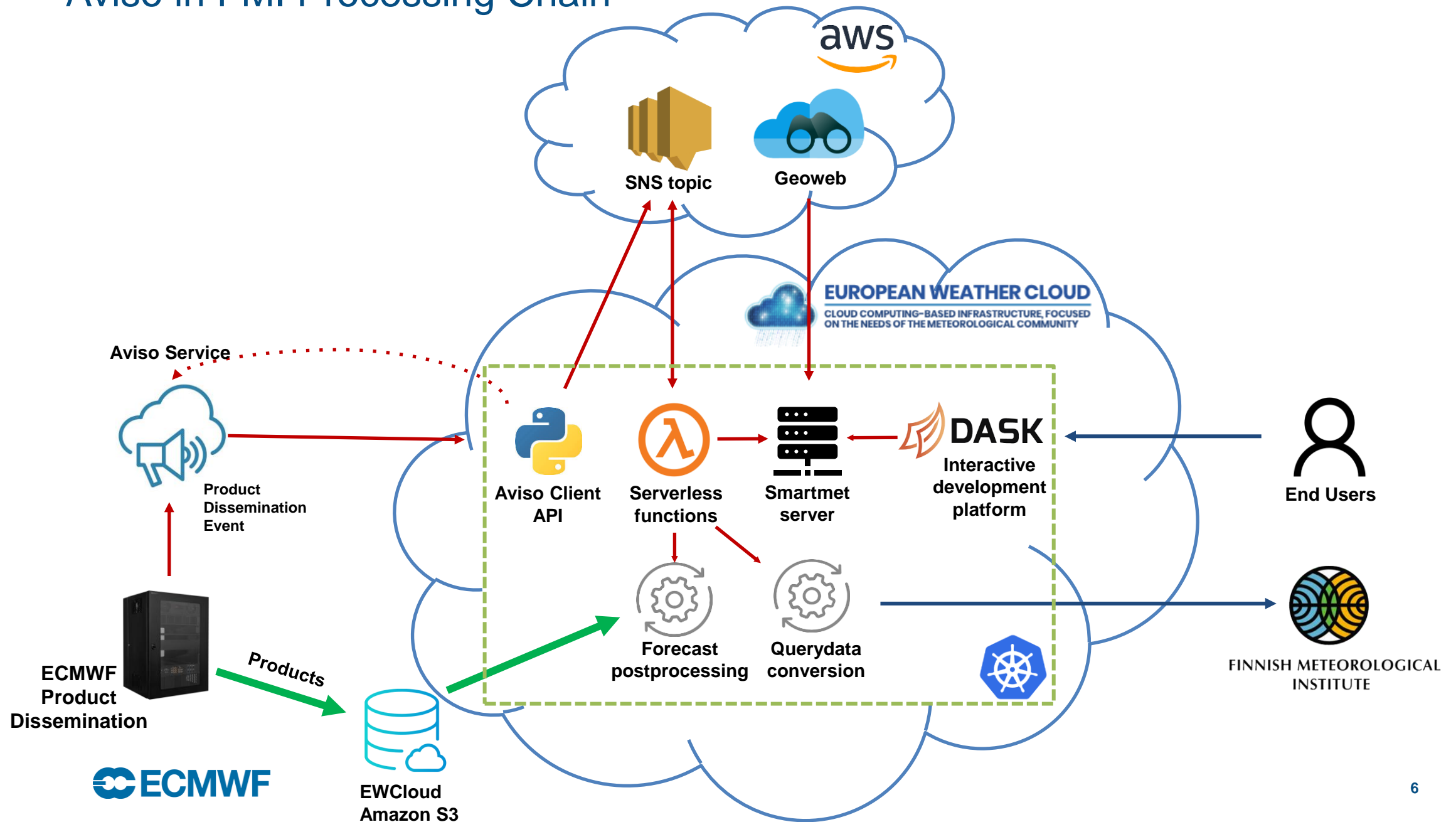


Aviso in MET Norway Processing Chain

Enabling real-time workflows to speed-up the delivery of derived products to end-users



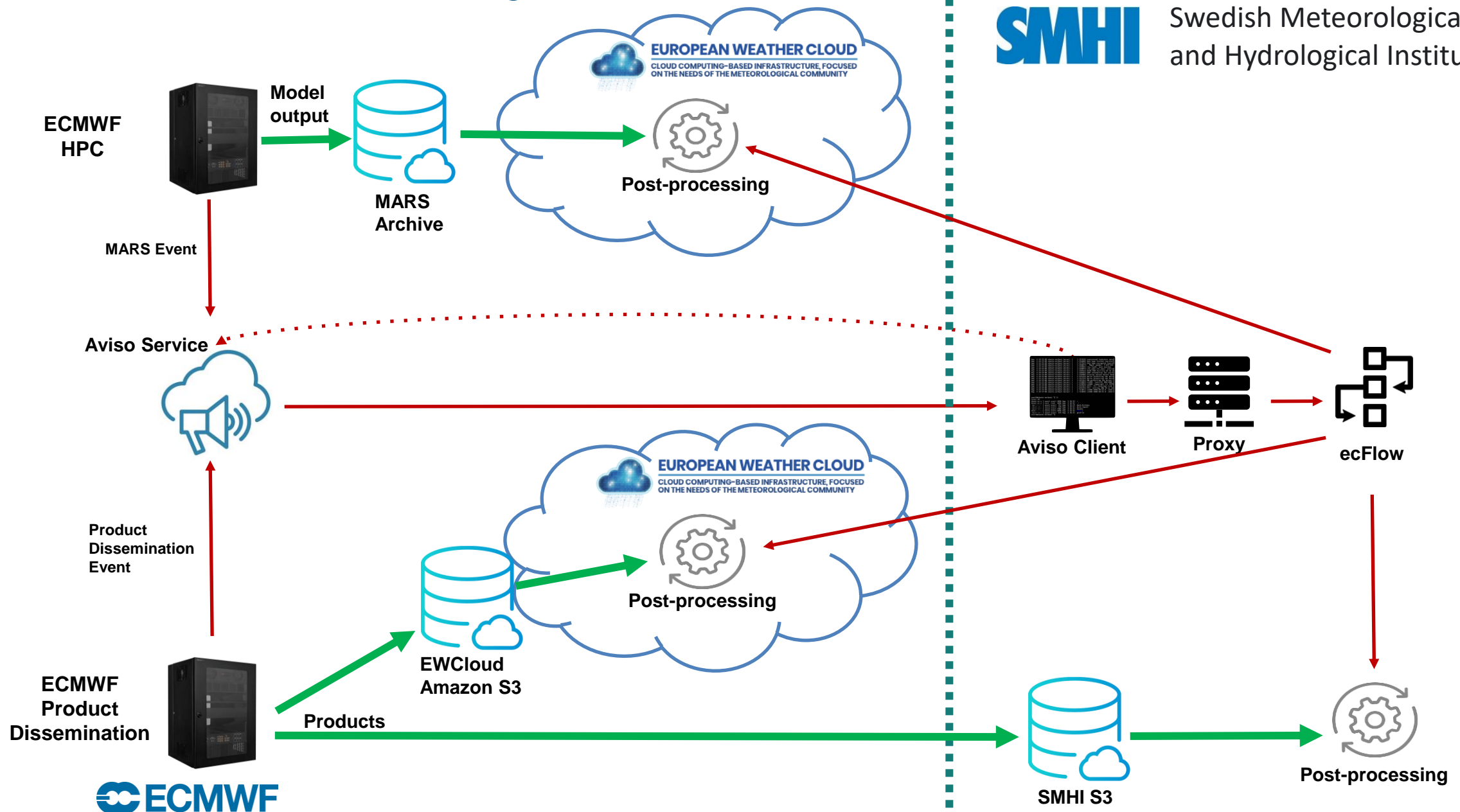
Aviso in FMI Processing Chain



Aviso in SMHI Processing Chain

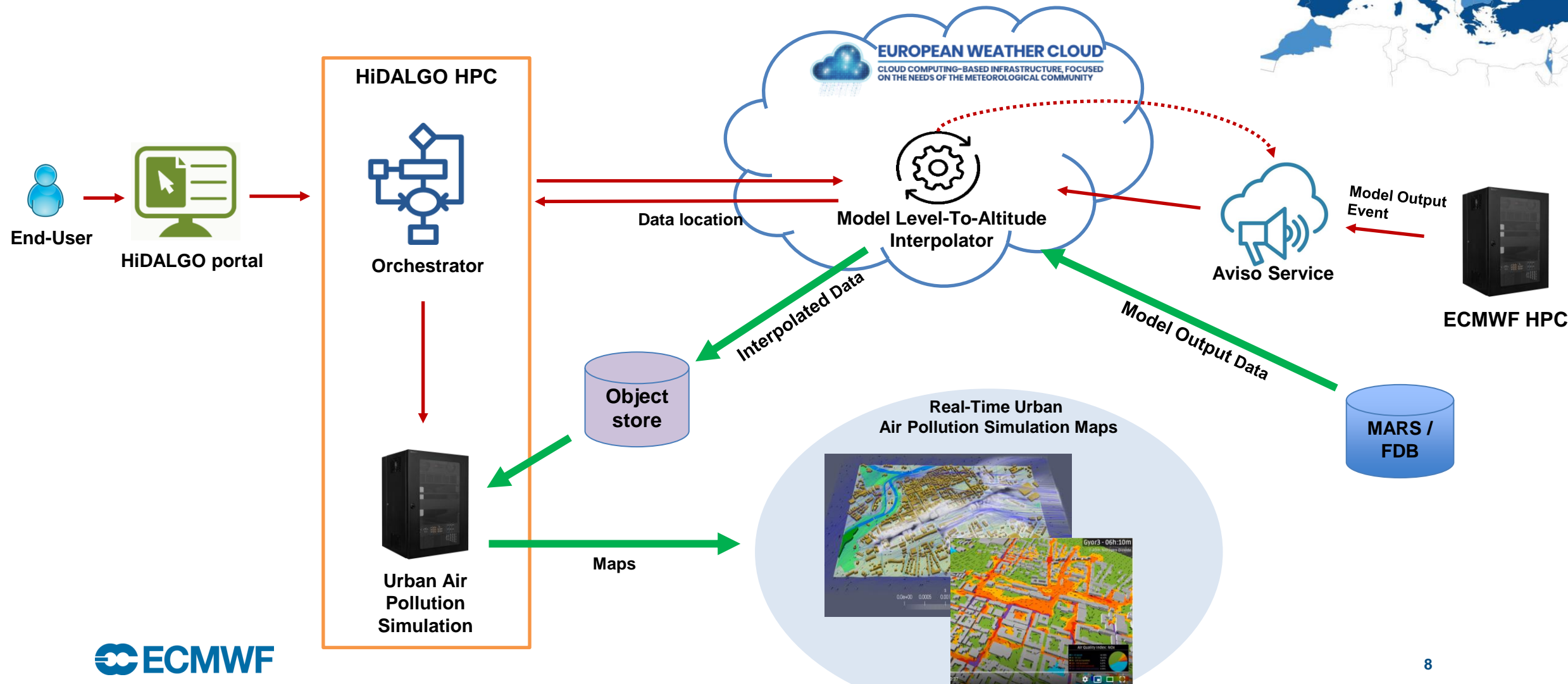


Swedish Meteorological
and Hydrological Institute



Aviso in EU HiDALGO Urban Air Pollution Pilot

Enabling real-time workflows across different data centres



Conclusions



- Aviso is a scalable notification system designed for high-throughput
- ECMWF data availability **of real-time forecast** data or derived **products**
- Automatic triggering of **user-defined workflows**
- **CloudEvents** compliant notifications for interoperability across clouds
 - **AWS SNS topic** under development

Current status

- Aviso Service is currently pre-operational – going to operations in 2022
- ~ **400K** notifications a day among real-time and product dissemination
- **Beta version released**



GitHub github.com/ecmwf/aviso



PyPI pypi.org/project/pyaviso



Read the Docs on pyaviso.readthedocs.io